



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

hax

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,473	07/29/2003	Takayoshi Togino	009523-0303920	4702
909 7590 09/17/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP Eric S. Cherry - Docketing Supervisor P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER TRAN, NHAN T	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/628,473	Applicant(s) TOGINO, TAKAYOSHI	
	Examiner Nhan T. Tran	Art Unit 2622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 7/3/2007 with respect to claims 10-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Specification***

2. The new title of the invention filed 7/3/2007 was received and accepted.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. **Claims 10-18** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,633,337 in view of Reelee et al. (US 5,893,037).

Regarding claim 10, the limitations of claim 10 of the instant application is met by the Patent claim 1 *except* for a portable telephone, wherein said portable telephone comprises a telephone unit and a unit separate from said telephone unit, said separate unit being connected to said telephone unit via a connector. Instead, the Patent claim 10 discloses the electronic camera as "a separate unit" having said two-dimensional display element and said magnifying optical system disposed therein.

However, it is well recognized by Reelee that an electronic camera unit (10) having an integrated viewfinder (18) can be electrically coupled to a cellular telephone unit (28) via a connector (24/26) to form a portable telephone having imaging capability (see Reelee; Fig. 2; col. 1, lines 55-62 and col. 2, lines 59-66). According to Reelee, the combination of the electronic camera and the cellular phone provides an advantage that allows the user to wirelessly transmit images from the camera unit to other devices via cellular communication transmission for video conferences or other purposes (see Reelee, col. 1, lines 10-15 and col. 6, lines 7-10).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of the Patent claim 10 and Reelee to create a portable phone by electrically coupling a telephone unit and a camera unit having a viewfinder so as to allow the user to wirelessly transmit images from the camera unit to other devices via

Art Unit: 2622

cellular communication transmission for video conferences or other purposes as suggested by Reelee above.

Regarding claims 11-18, these claims are also met by the Patent claims 2-9, respectively, in view of Reelee as discussed in claim 10.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuyama et al. (US 5,689,736) in view of Reelee et al. (US 5,893,037).

Regarding claim 10, Okuyama discloses a portable apparatus (a video camera; col. 1, lines 10-12) comprising:

a phototaking optical system (inherent lens of the video camera);

two-dimensional image pickup element for receiving an object image formed by said phototaking optical system (see col. 1, lines 10-12 and col. 2, line 40 in which a two-dimensional image pickup element is also inherently included in the video camera as an image sensor);

a two-dimensional display element (display 2 shown in Figs. 1A-2) for displaying said object image in the form of an image to be viewed (col. 4, lines 52-56);

a magnifying optical system (optical member 1 in Fig. 1A & 2) for guiding said image to a viewer's eyeball (col. 2, lines 36-46 and col. 4, lines 43-56), wherein: said magnifying optical system includes a first reflecting surface (surface a) for turning back an optical path between said two-dimensional display element and said viewers eyeball to achieve compactness (Figs. 1A & 2), said first reflecting surface being formed by a curved surface having an image-magnifying action (see col. 4, lines 47-51 and col. 2, lines 44-45).

As seen in Okuyama, the two-dimensional display element and the magnifying optical system disposed therein are implemented as a viewfinder of the camera in a camera unit, Okuyama does not disclose that the camera unit further comprises a separate telephone unit connected to the camera unit via a connector to form a portable telephone.

However, it is well recognized by Reele that an electronic camera unit (10) having an integrated viewfinder (18) can be electrically coupled to a cellular telephone unit (28) via a connector (24/26) to form a portable telephone with imaging capability (see Reele; Fig. 2; col. 1, lines 55-62 and col. 2, lines 59-66). According to Reele, the combination of the electronic camera and the cellular phone provides an advantage that allows the user to wirelessly transmit images from the camera unit to other devices via cellular communication transmission for video conferences or other purposes (see Reele, col. 1, lines 10-15 and col. 6, lines 7-10).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Okuyama and Reeley to create a portable phone by electrically coupling a telephone unit and a camera unit having a viewfinder so as to allow the user to wirelessly transmit images from the camera unit to other devices via cellular communication transmission for video conferences or other purposes as suggested by Reeley.

Regarding claim 11, it is also clear in Okuyama that said magnifying optical system further includes a second reflecting surface (surface b) located in opposition to said first reflecting surface (surface a) to turn back an optical path between said first reflecting surface and said second reflecting surface, thereby making a distance between said two-dimensional display element (2) and said viewer's eyeball short (see Okuyama, Fig. 2).

Regarding claim 12, Okuyama further discloses that said first reflecting surface and said second reflecting surface are a prism member (Fig. 2 and col. 2, lines 64-67) made up of a transparent medium having a refractive index ( $n$ ) greater than 1.3 (see the table in col. 9 and col. 10, wherein the refractive index of the prism is 1.49 which is greater than 1.3).

Regarding claim 13, Okuyama clearly shows in Figs. 1A & 2 that said first reflecting surface (surface a) is formed on one surface of said prism member, and said

second reflecting surface (surface b) is located at a position where *a medium* of said prism member is *sandwiched* between said first reflecting surface and said second reflecting surface.

Regarding claim 14, also disclosed by Okuyama is that the second surface (surface b) is combined transmitting and reflecting surface (transmitting light E to light sensor 6 and reflecting light L to the user's eye as shown in Fig. 2 and col. 5, lines 10-16).

Regarding claim 15, Okuyama further discloses that at least one of said first reflecting surface or said second reflecting surface is formed by a rotationally asymmetric surface having an action to make correction for aberrations produced by decentration (Fig. 2 and col. 3, lines 44-50).

Regarding claim 16, it is also seen in the combined teaching of Okuyama and Reelee that said two-dimensional image pickup element (an image sensor placed behind photographing lens, i.e., Fig. 1 of Reelee) is located in opposition to said two-dimensional display element (the display 2 of the viewfinder as shown in Fig. 1A of Okuyama; it should be noted that the display of the viewfinder is located at the top of the camera as indicated by 18 in Reelee).



5. Claims 17/10 – 17/16 and 18/10 – 18/16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuyama et al. and Reelee et al. as applied to claims 10-16 and in further view of Nakao (US 5,161,025).

Regarding claims 17/10 – 17/16, although Okuyama discloses the magnifying optical system including one surface to guide an image displayed on the display element (2) to the view's eyeball as shown in Fig. 2, Okuyama and Reelee do not explicitly disclose that said magnifying optical system has *two* actions, one to guide an image displayed on said two-dimensional display element to said viewer's eyeball and the other to guide object light phototaken by said phototaking optical system directly to said viewer's eyeball.

Nakao teaches a video camera including a magnifying optical system (Figs. 1-6, 12 & 13) that has two actions realized by combined light transmitting and reflecting surface of an optical element (134 shown in Fig. 13) that transmits light when shutter 160 is open, and reflects light from two-dimensional display element (i.e., LCD 138, 140 shown in Fig. 13) when shutter 160 is in a hybrid mode so that the viewer can see either or both images from optical viewfinder (OVF) and electronic viewfinder (EVF) in combination (see Nakao, col. 6, line 64 – col. 7, line 20).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Okuyama, Reelee and Nakao to construct a magnifying optical system having two actions, one to guide an image displayed on said two-dimensional display element to said viewer's eyeball and the other to guide object light phototaken

by said phototaking optical system directly to said viewer's eyeball for enabling a hybrid mode so that the view would be able to see either or both images from the optical viewfinder and the electronic viewfinder when necessary.

Regarding claim 18/10 - 18/16, Okuyama in view of Reelee as discussed in claims 10-16 teaches the camera unit (Fig. 3 of Reelee) comprises a signal processing circuit (image processor 48), a controller (control unit 50), a driver (display driver by control circuit 50) and a recording/reproducing unit (memory unit 52) are operated so that an object image received at said two-dimensional image pickup element (image sensor 44) is recorded in said recording/reproducing unit upon photoelectric conversion and, at the same time, is displayed on said two-dimensional display element by said driver via said controller during phototaking (in an electronic viewfinder mode), and, after phototaking a signal recorded in said recording/reproducing unit is reproduced to display an electronic image on said two-dimensional display element by said driver (in a playback mode) via said controller (see Reelee, Fig. 3 and col. 3, lines 15-63, and Okuyama, col. 4, liners 51-56).

Okuyama and Reelee do not explicitly teach that the signal processing circuit, the controller, the driver and the recording/reproducing unit are arranged between the two-dimensional image pickup element and the two-dimensional display element (the display 2 in the viewfinder disclosed by Okuyama which corresponds to the viewfinder 18 of Reelee).

However, this lack of teaching is compensated by Nakao, Figs. 12 & 13. Nakao discloses that, between the image sensor (122) and display element (138, 140) of the viewfinder (114), there are a signal processing circuit (124), a controller (126), a driver (164) and recording/reproducing unit (128) so that image received by the image pickup device and recorded in the recording/reproducing unit and is displayed at the same time or at a later time on the two-dimensional display element (138,140) by the driver (164) under control of EVF controller (126) (see Nakao, col. 5, line 57 – col. 6, line 17; col. 7, line 24-44 and col. 10, lines 37-47).

Therefore, it would have been obvious to one of ordinary skill in the art to configure the portable telephone of Okuyama and Reece to include the teaching of Nakao for arranging a signal processing circuit, a controller, a driver and a recording/reproducing unit in between the image sensor and the display element in a logic arrangement for circuit layout in a compact fashion so as to capture and process image signals to display the image on the display unit for the user to review during photographing.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NHAN T. TRAN  
Patent Examiner

A handwritten signature in black ink, appearing to read 'David Ometz', with a stylized, sweeping flourish extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER